

20 April 2023

PRELIMINARY SATELLITE-DERIVED FLOOD ASSESSMENT



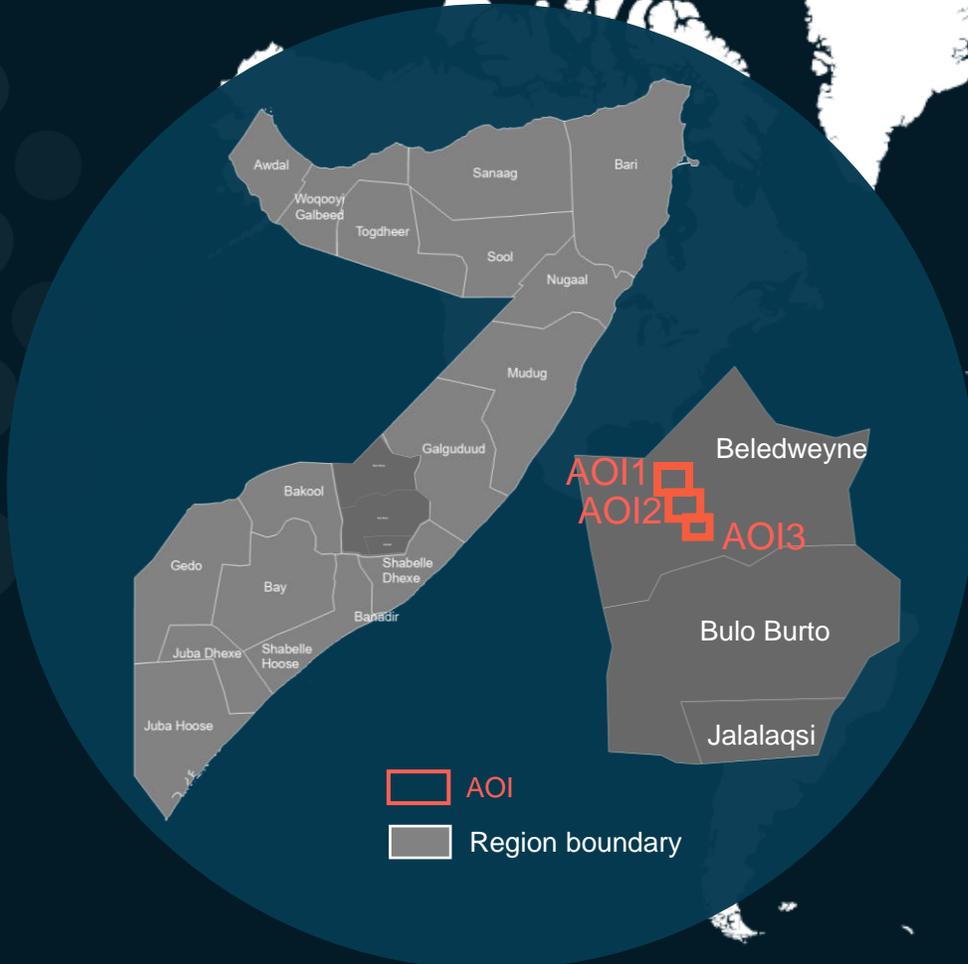
Beledweyne District, Hiraan Region, Somalia

 Status: Flooded structures observed along the Shabelle River

 Further action(s): continue monitoring

SOMALIA

20 April 2023



AOI 1 : BELEDWEYNE DISTRICT, HIRAAN REGION, SOMALIA

Flooded areas and increased water along the Shabelle River



Inundated agricultural area

Overflow of the river

Flooded area



Beledweyne city 4 km

500 m.



AOI 1 – 1: Garaash and Lafoole Villages, Beled Weyne District, Hiraan Region, Somalia

Inundated structures and agricultural area along the river

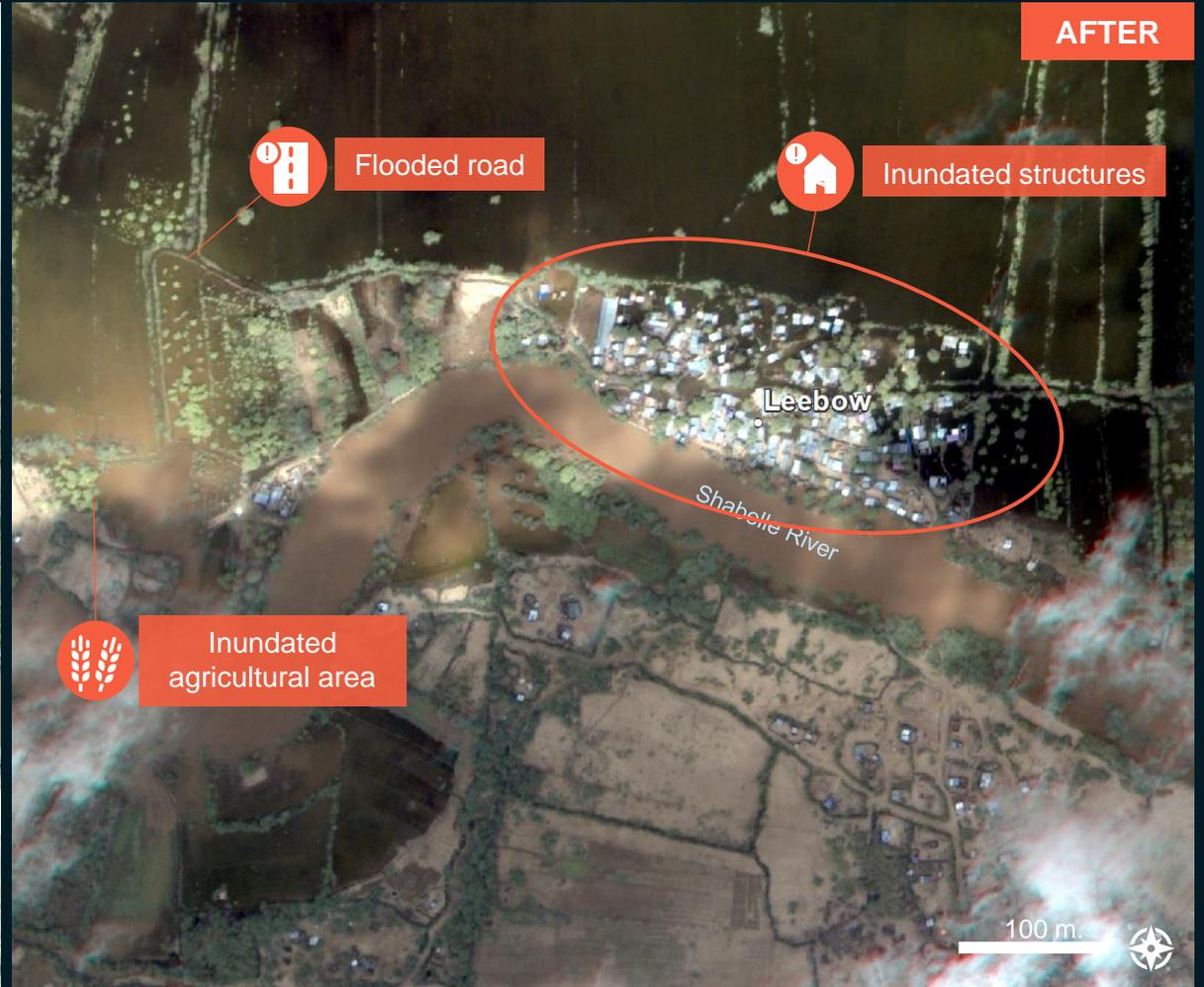
Image center:
45°10'36"E
4°48'33"N



AOI 1 – 2: Leebow Village, Beled Weyne District, Hiraan Region, Somalia

Inundated structures and agricultural area along the river

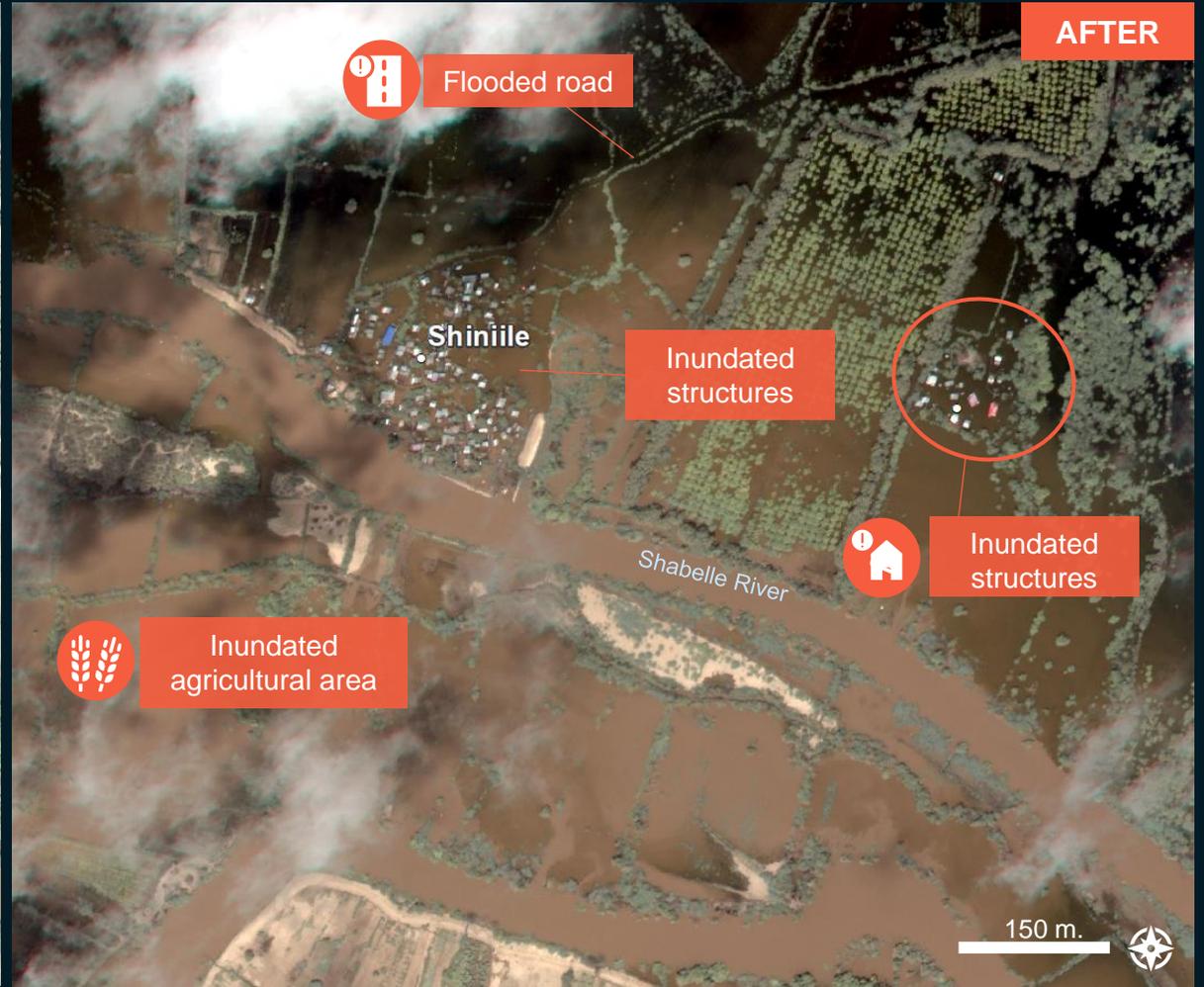
Image center:
45°11'43."E
4°47'44"N



AOI 1 – 3: Shiniile Village, Beled Weyne District, Hiraan Region, Somalia

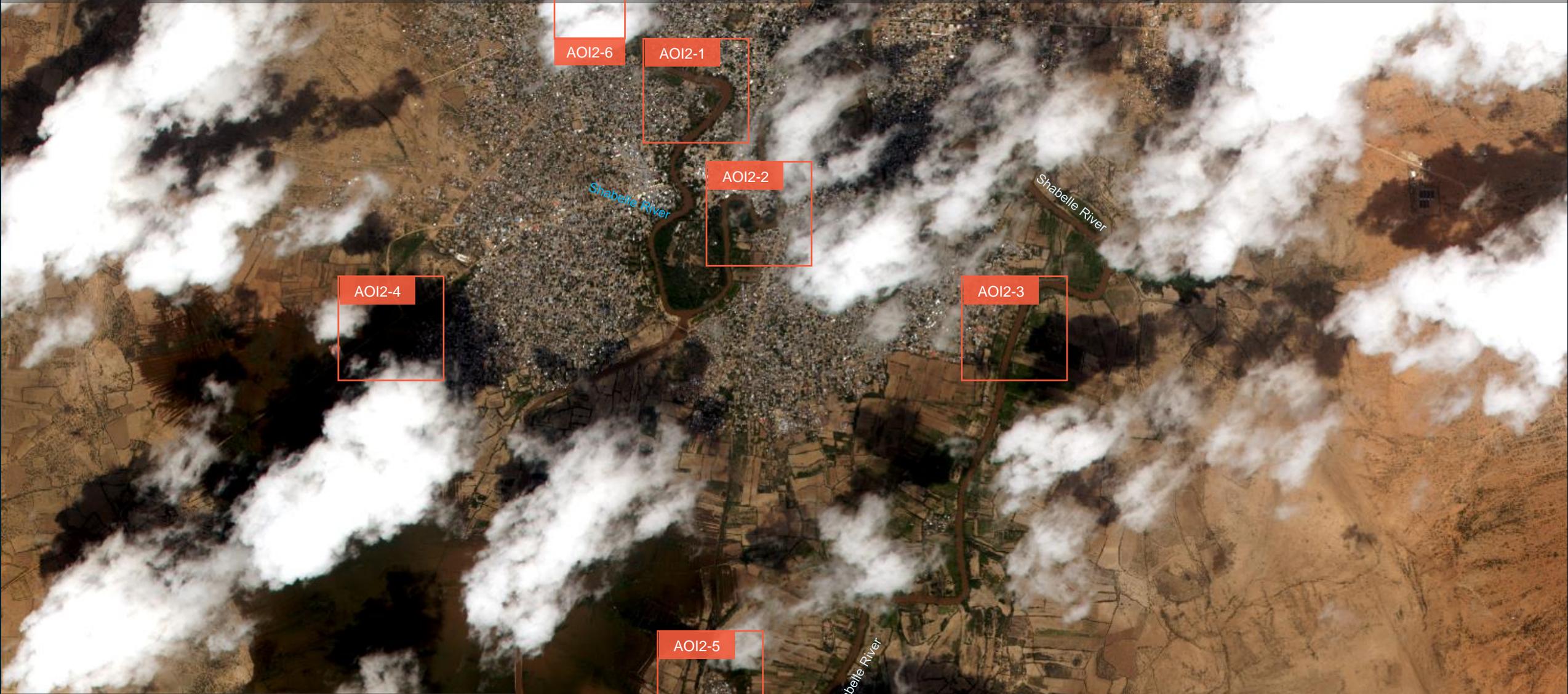
Inundated structures and agricultural area along the river

Image center:
45°12'50"E
4°47'29"N



AOI 2 : BELEDWEYNE CITY, HIRAAN REGION, SOMALIA

Flooded areas and increased water along the Shabelle River



AOI2-6

AOI2-1

AOI2-2

AOI2-4

AOI2-3

AOI2-5

Shabelle River

Shabelle River

Shabelle River

AOI 2 – 1: Beledweyne city, Beled Weyne District, Hiraan Region, Somalia

Increase of water in the river

Image center:
45°12'8"E
4°44'23"N



WorldView-3 / 31 March 2023



WorldView-3 / 19 April 2023

AOI 2 – 2: Beledweyne city, Beled Weyne District, Hiraan Region, Somalia

Increase of water in the river

Image center:
45°12'17"E
4°43'58"N



ESRI Base map / WorldView-2 / 06 March 2022



WorldView-3 / 19 April 2023

AOI 2 – 3: Beledweyne city, Beled Weyne District, Hiraan Region, Somalia

No flood observed

Image center:
45°13'10"E
4°43'33"N



BEFORE



AFTER

Shabelle River

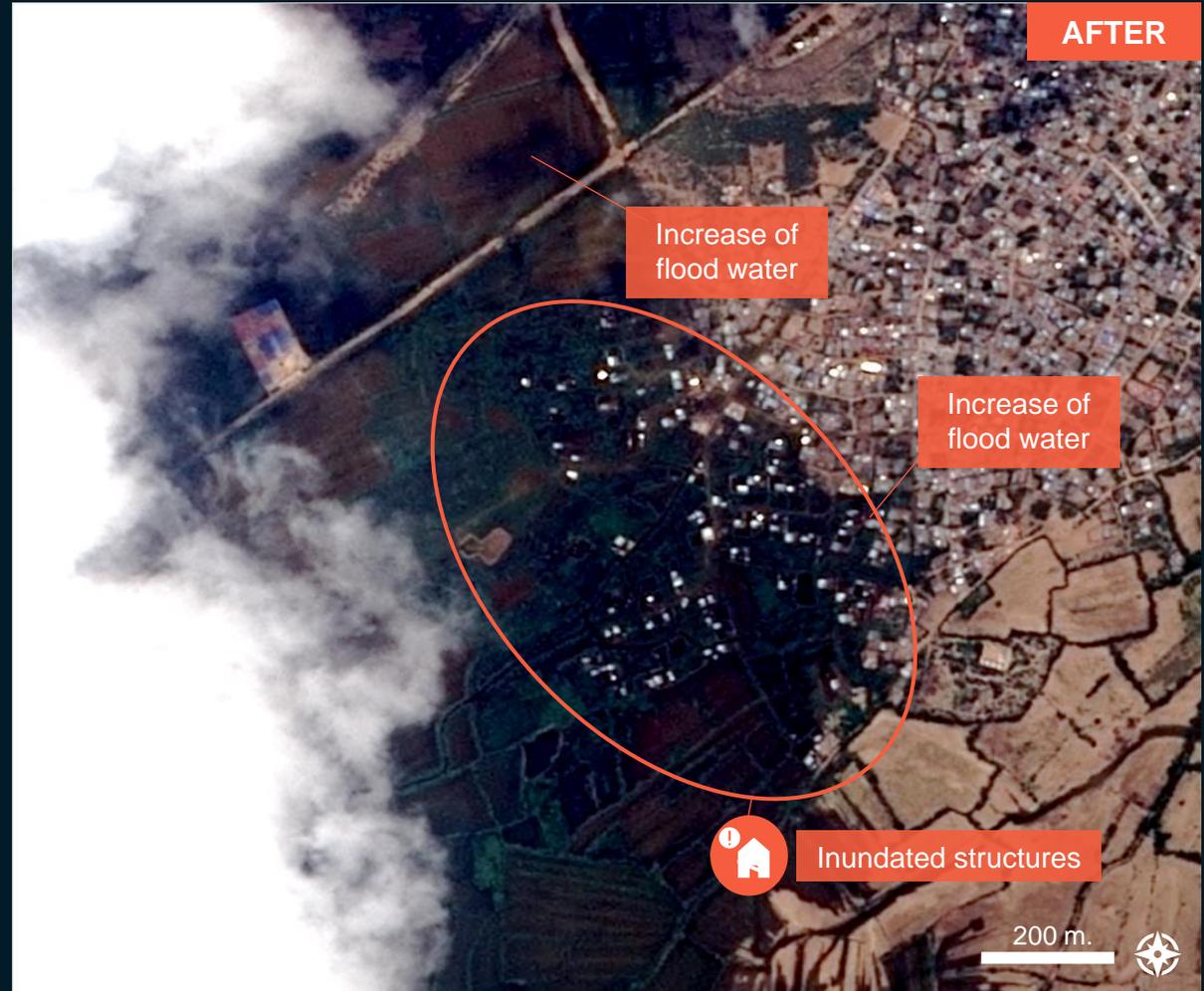
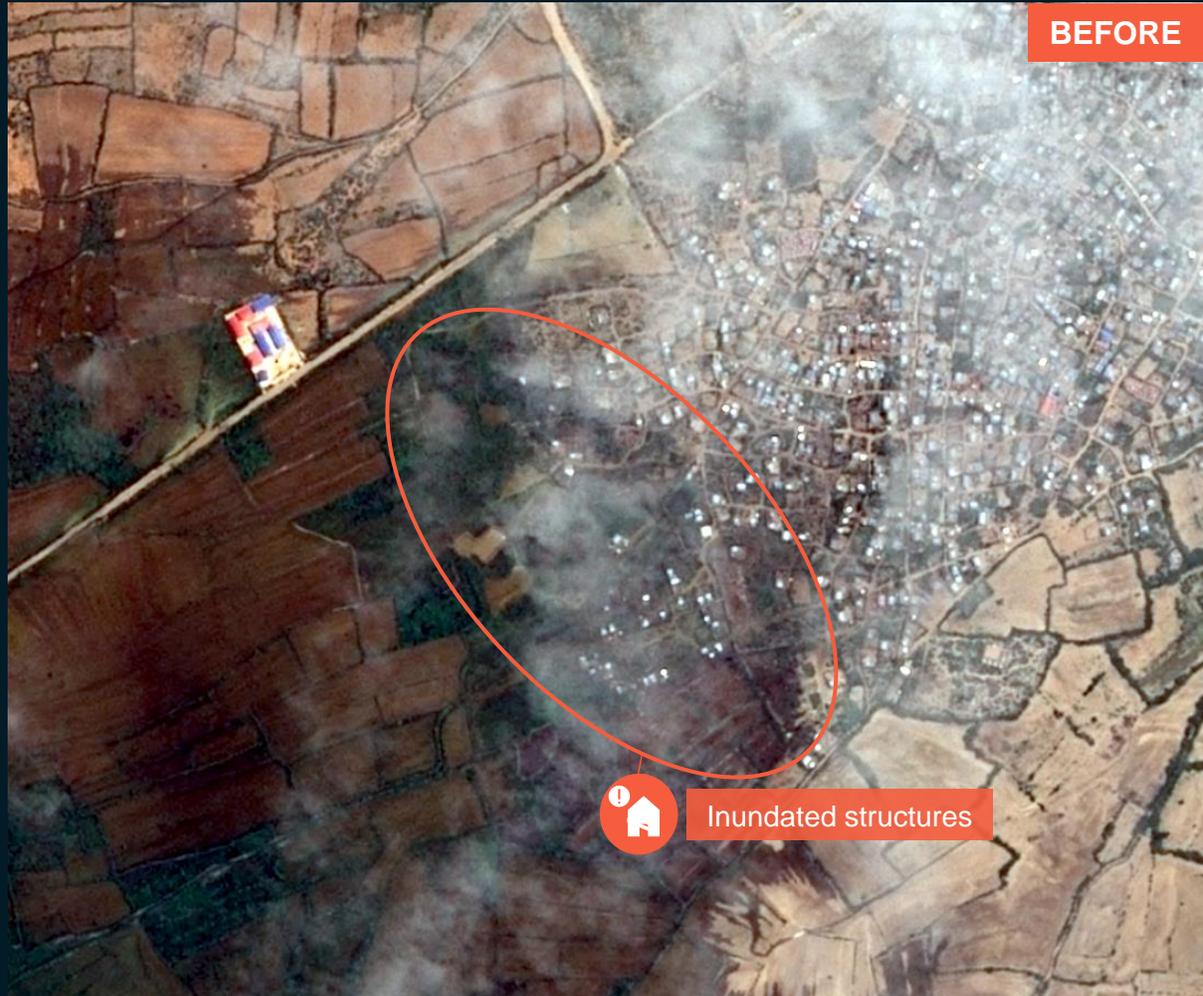
50 m.



AOI 2 – 4: Beledweyne city, Beled Weyne District, Hiraan Region, Somalia

Increase of flood water

Image center:
45°11'5"E
4°43'35"N



AOI 2 – 5: Gambarlawe Village, Beled Weyne District, Hiraan Region, Somalia

Image center:
45°12'10"E
4°42'19"N



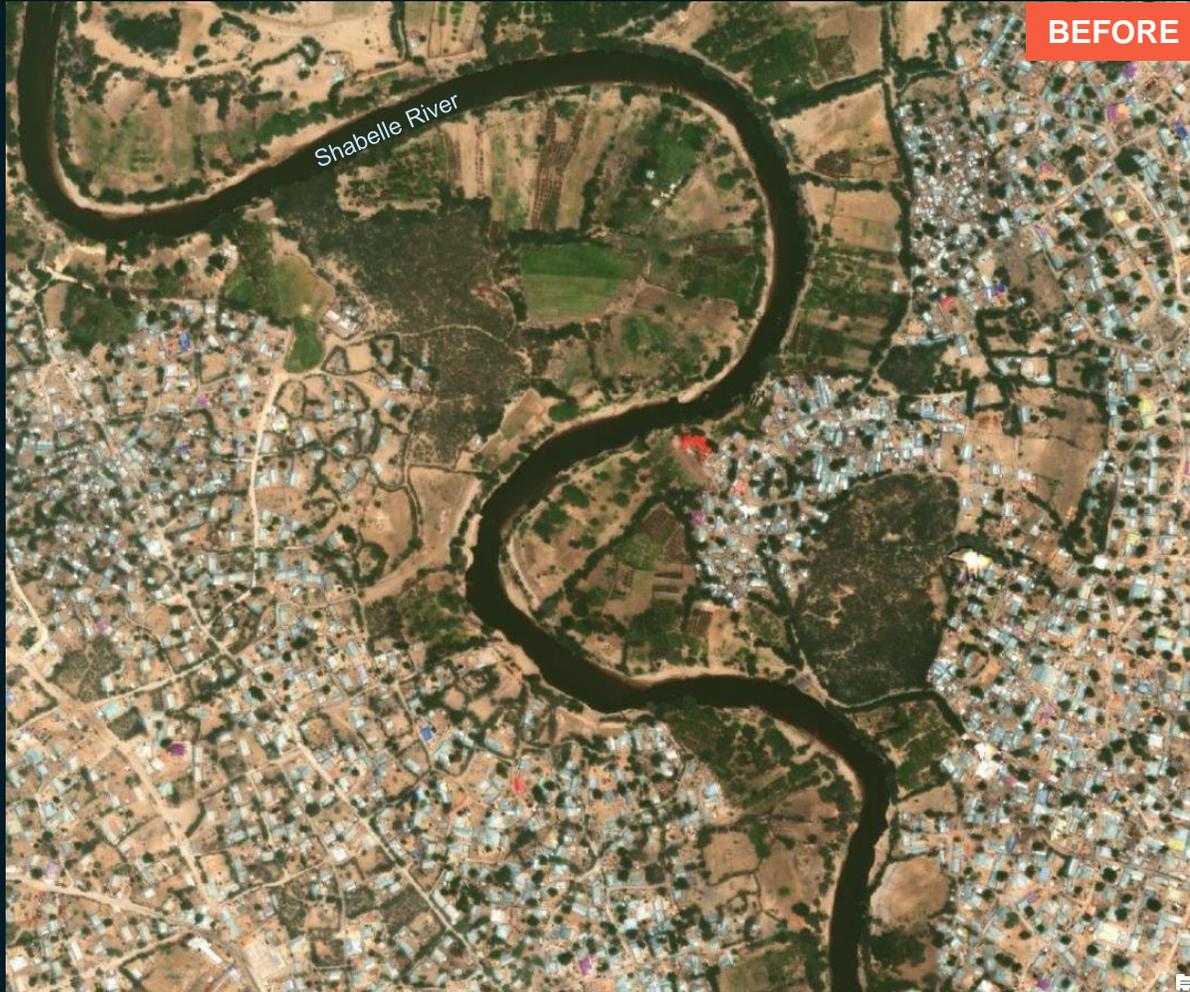
Increasing flood observed



AOI 2 – 6: Beled Weyne District, Hiraan Region, Somalia

Inundated structures and agricultural area along the river

Image center:
45°11'47"E
4°44'51"N



AOI 3 : BELEDWEYNE DISTRICT, HIRAAN REGION, SOMALIA

Flooded areas close to Shabelle River



AOI3-1

Shabelle River
Beledweyne city 8 km



AOI3-2



680 m

AOI 3 – 1: Beled Weyne District, Hiraan Region, Somalia

Flooded area close to Shabelle River

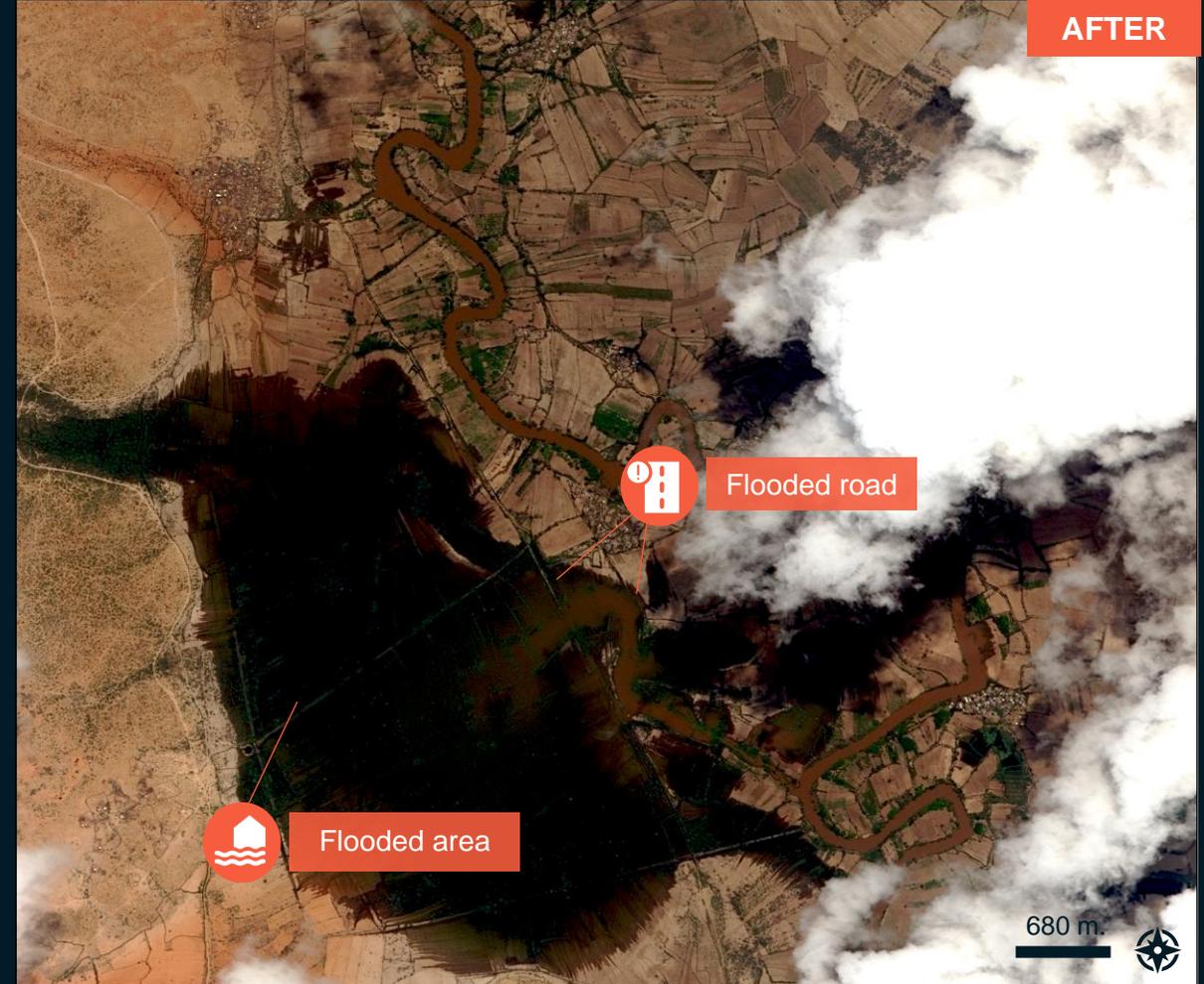
Image center:
45°12'46"E
N4°40'24"N



AOI 3 – 2: Beled Weyne District, Hiraan Region, Somalia

Flooded area close to Shabelle River

Image center:
45°13'48.4"E
4°38'49.8"N



SUMMARY OF FINDINGS

- Flooded areas observed along the Shabelle River in Beledweyne District, Hiraan Region, Somalia as of 20 April 2023;
- Potentially flooded structures and flooded agricultural areas in Garaash and Lafoole Villages, Beledweyne District, Hiraan Region, Somalia as of 19 April 2023;
- Inundated structures, roads and agricultural areas observed along the Shabelle River in Leebow and Shinille Villages, Beledweyne District, Hiraan Region, Somalia as of 19 April 2023;
- Flooded agricultural area and potentially inundated structures observed close to the water canal south of Beledweyne City, Beledweyne District, Hiraan Region, Somalia as of 19 April 2023;
- Increase of flood water observed in the southern area of Beledweyne City, Beledweyne District, Hiraan Region, Somalia between 18 and 20 April 2023;
- Flooded areas observed close to the Shabelle River about 8 km south of Beledweyne City Beledweyne District, Hiraan Region, Somalia as of 20 April 2023.

COPYRIGHTS & SOURCES

Data sources:

(1) Satellite Image (Post-event): : Worldview-3 Imagery

Acquisition date: 19 April 2023

Resolution: 50 cm

Copyright: 2023 Digital Globe Inc.

Source: USGS / HDDS Satellite Data

(2) Satellite Image (Post-event): SPOT-6

Acquisition date : 20 April 2023

Resolution: 1.5 m

Copyright: Includes material © AIRBUS DS (2023)

Source: CNES / SPOT6

(3) Satellite Image (Post-event): KOMPSAT-3

Acquisition date : 20 April 2023

Resolution: 70 cm

Copyright : © KARI (2022)

Source : KARI

(4) Satellite Image (Pre-event): SPOT-6

Acquisition date : 18 April 2023

Resolution: 1.5 m

Copyright: Includes material © AIRBUS DS (2023)

Source: CNES / SPOT6

(5) Satellite Image (Pre-event): ESRI Basemap

(5) Ancillary data

Administrative boundaries: OCHA Regional Office for Southern and Eastern Africa (ROSEA)

Populated place: OpenStreetMap

Waterway: OpenStreetMap

Analysis: United Nations Satellite Centre (UNOSAT)

Production: United Nations Satellite Centre (UNOSAT)

 **@UNOSAT**

 **@UNITAR.unosat**



UNOSAT, United Nations Institute for Training
and Research (UNITAR)
7 bis, Avenue de la Paix, CH-1202 Geneva 2,
Switzerland

T +41 22 917 4720
E unosat@unitar.org
www.unosat.org